

**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Peter NEUENSCHWANDER

Group Art Unit: 1796

Application No.: 10/564,360

Examiner: M. DOLLINGER

Filed: March 2, 2006

Docket No.: 126402

For: DEGRADABLE BIOCOMPATIBLE BLOCK COPOLYMER

**APPLICANT'S INTERVIEW SUMMARY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Dollinger in the August 17, 2009, interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

**I. Objection To The Specification**

During the interview, Applicant's representative argued that the reaction scheme illustrated on page 3, line 23 of the specification was not intended as a detailed mechanism for the reaction recited in claim 19. Instead, this reaction illustrates the formation of a diol (designated in the Reaction as "(1)") by the transesterification reaction of  $\alpha,\omega$ -dihydroxy-[oligo(3-(R)-hydroxybutyrate)-ethylene-oligo-3-(R)-hydroxybutyrate] (i.e., a PHB diol and designated in the Reaction as "(2)") with diglycolide (designated in the Reaction as "(3)") in the presence of a dibutyltin laureate catalyst.

Upon further review, Examiner Dollinger acknowledged that so long as the reaction would not confuse one of ordinary skill in the art, the objection would be withdrawn.

**II. Claim Objections And Provisional Double Patenting Rejections**

Examiner Dollinger agreed during the interview to withdraw the claim objections in view of the claim amendments presented in the Amendment filed August 3, 2009 ("Amendment"). Furthermore, Examiner Dollinger agreed that the provisional double patenting rejections would be held in abeyance until the claims of the present application are found allowable.

**III. Rejections Under 35 U.S.C. §103(a)****A. Neuenschwander In View Of Hori**

During the interview, Applicants representative argued that Neuenschwander and Hori do not describe the diol recited in claim 19. Specifically, Applicant argued that because Neuenschwander teaches an oligomer of hydroxybutyrate and Hori describes the reaction of a diglycolide, dilactide or caprolactone with an oligomer of butyrolactone (i.e., (R)- $\beta$ -butyrolactone and (S)- $\beta$ -butyrolactone), one having ordinary skill in the art would not have combined these teachings and performed a reaction of a diglycolide, dilactide or caprolactone with an oligomer of hydroxybutyrate.

Further, the difference between the oligomers of Neuenschwander and the present claims is confirmed by the fact that the block copolymer degradation rate (i.e., half-life) described in the Examples of Hori is in the range of several weeks. See, e.g., Example 21, Test Examples 1-8 and Figure 1. However, the degradation rate for the block copolymers of claim 1 is in the range of several days. See, Example 4 and Table 1 in paragraphs [0066] to [0071] of the specification, Example 4, Table 3.

At the conclusion of the interview, Examiner Dollinger recommended to submit a Rule 132 Declaration demonstrating that the combination of (1) the butyrolactone oligomer of Hori and (2) the hydroxybutyrate oligomer of Neuenschwander (i.e.,  $\alpha,\omega$ -dihydroxy-[oligo(3-(R)-hydroxybutyrate)-ethylene-oligo-3-(R)-hydroxybutyrate)] would not result in diol recited

in claim 19. Examiner Dollinger agreed that a Rule 132 Declaration could be helpful to overcome the present rejections. Applicant agreed to consider the Examiner's recommendation, although not agreeing such a showing was required.

**B. Neuenschwander In View Of Tokiwa**

Applicant's representative argued that Tokiwa, like Hori, does not describe the diol recited in claim 19. Specifically, Tokiwa describes a plastic composition comprising polycaprolactone and poly-beta-hydroxybutyrate that are partly copolymerized. The resulting blend comprises a polycaprolactone/poly-beta-hydroxybutyrate copolymer in admixture.

In response, Examiner Dollinger stated that while he understood Applicant's arguments, he alleged that because Neuenschwander describes a hydroxybutyrate oligomer and Hori describes caprolactone, one having ordinary skill in the art would have combined the subject matter of these two references.

Although Applicant's representative disagreed with Examiner Dollinger's conclusions, Applicant proposed to amend claim 19 to delete caprolactone as a component of the diol.

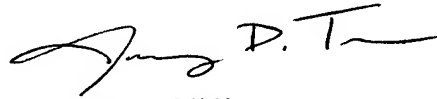
Examiner Dollinger acknowledged that amending claim 1 in this manner would most likely overcome this rejection, but cautioned that he would need to conduct an additional search. Applicant agreed to consider the Examiner's recommendation, although not agreeing such an amendment was required.

**III. Conclusion**

In view of the August 17, 2009, interview and the August 3, 2009 Amendment, Applicant will review the recommendations set forth by Examiner Dollinger. Applicant still respectfully submits that for the reasons discussed in the Amendment, this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 19-36 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Jeremy D. Tillman  
Registration No. 62,639

JAO:JDT/hs

Date: August 27, 2009

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---